ABSTRACT OF THE INVENTION

A semiconductor memory of this invention contains a memory cell block including a plurality of ferroelectric capacitors successively connected to one another along a bit line direction each for storing a data in accordance with displacement of polarization of a ferroelectric film thereof, and a reading transistor whose gate is connected to one end of the successively connected plural ferroelectric capacitors for reading a data by detecting the displacement of the polarization of the ferroelectric film of a ferroelectric capacitor selected from the plural ferroelectric capacitors. A set line is connected to the other end of the successively connected plural ferroelectric capacitors. A bit line is connected to the drain of the reading transistor at one end thereof. A reset line is connected to the source of the reading transistor at one end thereof. A plurality of word lines respectively corresponding to the plural ferroelectric capacitors are provided perpendicularly to the bit line, so as to select a ferroelectric capacitor from the plural ferroelectric capacitors for data write or data read.